Index to Volume XII Series II.

A.

Abbott, Raymond B., Law of Motion of a Droplet Moving with Variable Velocity in Air, 381.

Airpump, An Improved Form of Mercury Vapor, *Chas. T. Knipp*, 492.

Alexander, Lowell M., On the Effect of a Magnetic Field upon Cathode Rays, 1.

Alpha Rays, Some Properties of Metals under the Influence of, *A. C. McGougan*, 122.

American Physical Society:
Abstracts, 167, 491.

Arcs, Ionization of Mercury, Sodium and Potassium Vapors and the Production of Low Voltage, in these Vapors, *T. C. Hebb*, 482.

Atomic Heats of Tungsten and of Carbon at Incandescent Temperatures, *A. G. Worthing*, 199

Atomic Number, Electronic Frequency and, *Paul D. Foote*, 115.

B.

Barnett, S. J., On Electromagnetic Induction and Relative Motion, II., 95.

Bateman, H., The Electromagnetic Vectors, 459.

Bohr's Atom, On, and Magnetism, *Jakob Kunz*, 59.

Bismuth-tin Alloys, Thomson Effect in, *A. E. Caswell*, 231.

Bismuth-tin Alloys, Conductivities and Thermo-electric Powers of, *A. E. Caswell* and *Cecil A. McKay*, 226.

C.

Calcite, Remarks on a Paper by Arthur H. Compton Entitled "Note on the Grating Space of, and the X-Ray Spectrum of Gallium, *H. S. Uhler*, 39.

Calcite, The Photoluminescence and Kathodo-Luminescence of, *E. L. Nichols, H. L. Howes* and *D. T. Wilber*, 351.

Caswell, A. E., Conductivities and Thermo-electric Powers of Bismuth-tin Alloys, 226.
Thomson Effect in Bismuth-tin Alloys, 231.

Cathode Fall, Simplified Theory of the, in Gases with Application to Plates and Wires, *C. A. Skinner*, 143.

Cathodes, Polarization Measurements at Wire, in Separately Ionized Gases, *C. A. Skinner*, 136.

Cathode Rays, On the Effect of a Magnetic Field upon, *Louis T. More* and *Lowell M. Alexander*, 1.

Child, C. D., Electric Force on the Mercury Arc, 277.

Chinmayanandam, T. K., The Diffraction of Light by an Obliquely held Cylinder, 314.

Compton, Arthur H., Remarks on a Paper by, Entitled" Note on the Grating Space of Calcite and the X-Ray Spectrum of Gallium, *H. S. Uhler*, 39.

Conductivities and Thermo-electric Powers of Bismuth-tin Alloys, *A. E. Caswell* and *Cecil A. McKay*, 226.

Corbino Effect, Note on the Reversal of the, in Iron, *Alpheus W. Smith*, 337.

Crehore, Albert C., Derivation of the Newtonian Constant of Gravitation in Terms of the Properties of Electrons, 13.

D.

Daylight, A Precision Method for Producing Artificial, 493.

Dielectrics, Effects of, on the Sparking Voltage, *E. R. Wolcott*, 284.

Diffraction of Light, The, by an Obliquely held Cylinder, *T. K. Chinmayanandam*, 314.

Doublet, The Motion of an Electrical, *Leigh Page*, 371.

Droplet, Law of Motion of a, Moving with Variable Velocity in Air, *Raymond B. Abbott*, 381.

E.

Electric Force on the Mercury Arc, *C. D. Child*, 277.

Electromagnetic Vectors, The, *H. Bateman*, 459.

Electronic Frequency and Atomic Number, *Paul D. Foote*, 115.

Electric Furnace, Temperature Uniformity in an, *John B. Ferguson*, 79.

Electric Potential, The Relation between the Specific Inductive Capacity of an Electrolyte and the, of a Metal Placed in it, *Dayton L. Ulrey*, 47.

Electrical Conductivity, The, of Vertically Suspended Wires, *S. R. Williams*, 243.

Electrical Doublet, The Motion of an, *Leigh Page*, 371.

Index to Volume XII Series II.

A.

Abbott, Raymond B., Law of Motion of a Droplet Moving with Variable Velocity in Air, 381.

Airpump, An Improved Form of Mercury Vapor, *Chas. T. Knipp*, 492.

Alexander, Lowell M., On the Effect of a Magnetic Field upon Cathode Rays, 1.

Alpha Rays, Some Properties of Metals under the Influence of, *A. C. McGougan*, 122.

American Physical Society:
Abstracts, 167, 491.

Arcs, Ionization of Mercury, Sodium and Potassium Vapors and the Production of Low Voltage, in these Vapors, *T. C. Hebb*, 482.

Atomic Heats of Tungsten and of Carbon at Incandescent Temperatures, *A. G. Worthing*, 199

Atomic Number, Electronic Frequency and, *Paul D. Foote*, 115.

B.

Barnett, S. J., On Electromagnetic Induction and Relative Motion, II., 95.

Bateman, H., The Electromagnetic Vectors, 459.

Bohr's Atom, On, and Magnetism, *Jakob Kunz*, 59.

Bismuth-tin Alloys, Thomson Effect in, *A. E. Caswell*, 231.

Bismuth-tin Alloys, Conductivities and Thermo-electric Powers of, *A. E. Caswell* and *Cecil A. McKay*, 226.

C.

Calcite, Remarks on a Paper by Arthur H. Compton Entitled "Note on the Grating Space of, and the X-Ray Spectrum of Gallium, *H. S. Uhler*, 39.

Calcite, The Photoluminescence and Kathodo-Luminescence of, *E. L. Nichols, H. L. Howes* and *D. T. Wilber*, 351.

Caswell, A. E., Conductivities and Thermo-electric Powers of Bismuth-tin Alloys, 226.
Thomson Effect in Bismuth-tin Alloys, 231.

Cathode Fall, Simplified Theory of the, in Gases with Application to Plates and Wires, *C. A. Skinner*, 143.

Cathodes, Polarization Measurements at Wire, in Separately Ionized Gases, *C. A. Skinner*, 136.

Cathode Rays, On the Effect of a Magnetic Field upon, *Louis T. More* and *Lowell M. Alexander*, 1.

Child, C. D., Electric Force on the Mercury Arc, 277.

Chinmayanandam, T. K., The Diffraction of Light by an Obliquely held Cylinder, 314.

Compton, Arthur H., Remarks on a Paper by, Entitled" Note on the Grating Space of Calcite and the X-Ray Spectrum of Gallium, *H. S. Uhler*, 39.

Conductivities and Thermo-electric Powers of Bismuth-tin Alloys, *A. E. Caswell* and *Cecil A. McKay*, 226.

Corbino Effect, Note on the Reversal of the, in Iron, *Alpheus W. Smith*, 337.

Crehore, Albert C., Derivation of the Newtonian Constant of Gravitation in Terms of the Properties of Electrons, 13.

D.

Daylight, A Precision Method for Producing Artificial, 493.

Dielectrics, Effects of, on the Sparking Voltage, *E. R. Wolcott*, 284.

Diffraction of Light, The, by an Obliquely held Cylinder, *T. K. Chinmayanandam*, 314.

Doublet, The Motion of an Electrical, *Leigh Page*, 371.

Droplet, Law of Motion of a, Moving with Variable Velocity in Air, *Raymond B. Abbott*, 381.

E.

Electric Force on the Mercury Arc, *C. D. Child*, 277.

Electromagnetic Vectors, The, *H. Bateman*, 459.

Electronic Frequency and Atomic Number, *Paul D. Foote*, 115.

Electric Furnace, Temperature Uniformity in an, *John B. Ferguson*, 79.

Electric Potential, The Relation between the Specific Inductive Capacity of an Electrolyte and the, of a Metal Placed in it, *Dayton L. Ulrey*, 47.

Electrical Conductivity, The, of Vertically Suspended Wires, *S. R. Williams*, 243.

Electrical Doublet, The Motion of an, *Leigh Page*, 371.

Electrolyte, The Relation between the Specific Inductive Capacity of an, and the Electric Potential of a Metal Placed in it, *Dayton L. Ulrey*, 47.
Electromagnetic Induction, On, and Relative Motion, II., *S. J. Barnett*, 95.
Electrons, Derivation of the Newtonian Constant of Gravitation in Terms of the Properties of, *Albert C. Crehore*, 13.
Electrons, On the Supposed Gravitational Attraction between two Revolving, *G. A. Schott*, 23.
Emission of Gases, On the Variations of the Photo-electric Current due to Heating and the Occulsion and, *L. A. Welo*, 251.
Errata, 493.
Evaporation, The, of Small Spheres, *Irving Langmuir*, 368.

F.

Ferguson, John B., Temperature Uniformity in an Electric Furnace, 79.
Ferromagnetic Substances, Note on the Weiss Molecular Field in, *Kotaro Honda*, 238.
Foote, Paul D., Electronic Frequency and Atomic Number, 115.

G.

Gaehr, Paul Frederick, The Specific Heat of Tungsten at Incandescent Temperatures, 396.
Galvanomagnetic Phenomena, The Relation between Certain, *C. W. Heaps*, 340.
Gases, The Effect of, and Metallic Vapors on the Electrical Properties Exhibited by Selenium Crystals of the Hexagonal System, *W. E. Tisdale*, 325.
Gases and Vapors from Glass, *R. G. Sherwood*, 448.
Geissler Tube, On the Effect of a Transverse Magnetic Field on the Discharge through a Geissler Tube, *James E. Ives*, 293, 493.
Glass, Gases and Vapors from, *R. G. Sherwood*, 448.
Gravitation, Derivation of the Newtonian Constant of, in Terms of the Properties of Electrons, *Albert C. Crehore*, 13.
Gravitational Attraction, On the Supposed, between two Revolving Electrons, *G. A. Schott*, 23.

H.

Heaps, C. W., The Relation between Certain Galvanomagnetic Phenomena, 340
Hebb, T. C., Ionization of Mercury, Sodium and Potassium Vapors and the Production of Low Voltage Arcs in these Vapors, 482.
High Vacua, Extra-Violet Spectra of Hot Sparks in, *R. A. Millikan and R. A. Sawyer*, 167.
Honda, Kotaro, Latent Heat of Fusion as the Energy of Molecular Rotations, 425.
Howes, H. L., The Photoluminescence and Kathodo-Luminescence of Calcite, 351.
Note on the Weiss Molecular Field in Ferromagnetic Substances, 238.
Hot Sparks, Extreme Ultra-Violet Spectra of, in High Vacua, *R. A. Millikan* and *R. A. Sawyer*, 167.

I.

Impact, The Photographic Study of, at Minimal Velocities, *C. V. Raman*, 442.
Incandescent Temperatures, Atomic Heats of Tungsten and of Carbon at, *A. G. Worthing*, 199.
Incandescent Temperatures, The Specific Heat of Tungsten at, *Paul Frederick Gaehr*, 396.
Ionization of Mercury, Sodium and Potassium Vapors and the Production of Low Voltage Arcs in these Vapors, *T. C. Hebb*, 482.
Ives, James E., On the Effect of a Transverse Magnetic Field on the Discharge through a Geissler Tube, 293, 493.

K.

Kathodo-Luminescence, The Photoluminescence and, of Calcite, *E. L. Nichols, H. L. Howes* and *D. T. Wilber*, 351.
Knipp, Chas. T., an Improved Form of Mercury Vapor Air Pump, 492.
A Possible Standard of Sound, 491.
Kunz, Jakob, On Bohr's Atom and Magnetism, 59.

L.

Latent Heat of Fusion as the Energy of Molecular Rotations, *Kotaro Honda*, 425.
Langmuir, Irving, The Evaporation of Small Spheres, 368.

M.

McKay, Cecil A., Conductivities and Thermo-electric Powers of Bismuth-tin Alloys, 226.
McGougan, A. C., Some Properties of Metals under the Influence of Alpha Rays, 122.
Magnetic Field, On the Effect of a, upon Cathode Rays, *Louis T. More* and *Lowell M. Alexander*, 1.
Magnetic Properties, The, of Some Rare Earth Oxides as a Function of the Temperature, *E. H. Williams*, 158.
Magnetism, On Bohr's Atom and, *Jakob Kunz*, 59.
Mercury Arc, Electric Force on the, *C. D. Child*, 277.
Mercury Vapor Air Pump, An Improved Form of, *Chas T. Knipp*, 492.

Metals, Some Properties of, under the Influence of Alpha Rays, *A. C. McGougan*, 122.
Metallic Vapors, The Effect of Gases and, on the Electrical Properties Exhibited by Selenium Crystals of the Hexagonal System, *W. E. Tisdale*, 325.
Millikan, R. A., Extreme Ultra-Violet Spectra of Hot Sparks in High Vacua, 167.
Minimal Velocities, The Photographic Study of Impact at, *C. V. Raman*, 442.
More, Louis T., On the Effect of a Magnetic Field upon Cathode Rays, 1.
Molecular Rotations, Latent Heat of Fusion as the Energy of, *Kotaro Honda*, 425.
Motion, The, of an Electrical Doublet, *Leigh Page*, 371.
Motion, Law of, of a Droplet Moving with Variable Velocity in Air, *Raymond B. Abbott*, 381.

N.

Nichols, E. L., The Photoluminescence and Kathodo-Luminescence of Calcite, 351.
New Books, 336, 424.
Newtonian Constant, Derivation of the, of Gravitation in Terms of the Properties of Electrons, *Albert C. Crehore*, 13.

O.

Occlusion of Gases, On the Variations of the Photo-electric Current due to Heating and the Emission of and, *L. A. Welo*, 251.

P.

Page, Leigh, The Motion of an Electrical Doublet, 371.
Photo-electric Current, On the Variations of the, due to Heating and the Occlusion and Emission of Gases, *L. A. Welo*, 251.
Photographic Study, The, of Impact at Minimal Velocities, *C. V. Raman*, 442.
Photoluminescence, The, and Kathodo-Luminescence of Calcite, *E. L. Nichols, H. L. Howes* and *D. T. Wilber*, 351.
Platinum, The Specific Heat of, at High Temperatures, *Walter P. White*, 436.
Polarization Measurements at Wire Cathodes in Separately Ionized Gases, *C. A. Skinner*, 136.
Precision Method, A, for Producing Artificial Daylight, *Irwin G. Priest*, 493.
Priest, Irwin G., A Precision Method for Producing Artificial Daylight, 493.
The Law of Symmetry of the Visibility Function, 493.

R.

Raman, C. V., The Photographic Study of Impact at Minimal Velocities, 442.
Rare Earth Oxides, The Magnetic Properties of Some, as a Function of the Temperature, *E. H. Williams*, 158.
Relative Motion, On Electromagnetic Induction and, II., *S. J. Barnett*, 95.

S.

Sanford, Fernando, On the Specific Inductive Capacity of Metals, 130.
Sawyer, R. A., Extreme Ultra-Violet Spectra of Hot Sparks in High Vacua, 167.
Schott, G. A., On the Supposed Gravitational Attraction between two Revolving Electrons, 23.
Selenium Crystals, The Effect of Gases and Metallic Vapors on the Electrical Properties Exhibited by, of the Hexagonal System, *W. E. Tisdale*, 325, 493.
Sherwood, R. G., Production and Measurement of High Vacua, 70.
Gases and Vapors from Glass, 448.
Shrader, J. E., Production and Measurement of High Vacua, 70.
Skinner, C. A., Polarization Measurements at Wire Cathodes in Separately Ionized Gases, 136.
Simplified Theory of the Cathode Fall in Gases with Application to Plates and Wires, 143.
Smith, Alpheus W., Note on the Reversal of the Corbino Effect in Iron, 337.
Sound, A Possible Standard of, *Chas. T. Knipp*, 491.
Sparking Voltage, Effects of Dielectrics on the, *E. R. Wolcott*, 284.
Specific Heat, The, of Tungsten at Incandescent Temperatures, *Paul Frederick Gaehr*, 396.
Specific Heat, The, of Platinum at High Temperatures, *Walter P. White*, 436.
Specific Inductive Capacity, The Relation between the, of an Electrolyte and the Electric Potential of a Metal Placed in it, *Dayton L. Ulrey*, 47.
Specific Inductive Capacity, On the, of Metals, *Fernando Sanford*, 130.
Spheres, The Evaporation of Small, *Irving Langmuir*, 368.

T.

Temperature Uniformity in an Electric Furnace, *John B. Ferguson*, 79.
Thermo-electric Powers, Conductivities and, of Bismuth-tin Alloys, *A. E. Caswell* and *Cecil A. McKay*, 226.
Thermionic Amplifier, Theory of the, *K. J. Van der Bijl*, 171.
Thomson Effect in Bismuth-tin Alloys, *A. E. Caswell*, 231.
Tisdale, W. E., The Effect of Gases and Metallic Vapors on the Electrical Properties Exhibited by Selenium Crystals of the Hexagonal System, 325, 493.

Transverse Magnetic Field, On the Effect of a, on the Discharge through a Geissler Tube, *James E. Ives*, 293.
Tungsten, The Specific Heat of, at Incandescent Temperatures, *Paul Frederick Gaehr*, 396.

U.

Uhler, H. S., Remarks on a Paper by Arthur H. Compton Entitled "Note on the Grating Space of Calcite and the X-Ray Spectrum of Gallium," 39.
Ulrey, Dayton L., The Relation between the Specific Inductive Capacity of an Electrolyte and the Electric Potential of a Metal Placed in it, 47.
Ultra-Violet, Extreme, of Hot Sparks in High Vacua, *R. A. Millikan* and *R. A. Sawyer*, 167.

V.

Vacua, Production and Measurement of High, *J. E. Shrader* and *R. G. Sherwood*, 70.
Van der Bijl, H. J., Theory of the Thermionic Amplifier, 171.
Velocity in Air, Law of Motion of a Droplet Moving with Variable, *Raymond B. Abbott*, 381.
Visibility Function, The Law of Symmetry of the, *Irwin G. Priest*, 493.

W.

Welo, L. A., On the Variations of the Photoelectric Current due to Heating and the Occlusion and Emission of Gases, 251.
Weiss Molecular Field, Note on the, in Ferromagnetic Substances, *Kotaro Honda*, 238.
White, Walter P., The Specific Heat of Platinum at High Temperatures, 436.
Wilber, D. T., The Photoluminescence and Kathodo-Luminescence of Calcite, 351.
Williams, E. H., The Magnetic Properties of Some Rare Earth Oxides as a Function of the Temperature, 158.
Williams, S. R., The Electrical Conductivity of Vertically Suspended Wires, 243.
Wolcott, E. R., Effects of Dielectrics on the Sparking Voltage, 284.
Worthing, A. G., Atomic Heats of Tungsten and of Carbon at Incandescent Temperatures, 199.

X.

X-Ray Spectrum of Gallium, Remarks on a Paper by Arthur H. Compton Entitled "Note on the Grating Space of Calcite and the," *H. S. Uhler*, 39.